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09/778,486	02/07/2001	Christopher J. Edge	10259US01	4711

7590

10/24/2002

Attention: William D. Bauer  
Imation Corp.  
Legal Affairs  
P.O. Box 64898  
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EXAMINER

SHAPIRO, LEONID

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 10/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

15

## Office Action Summary

Application No.

09/778,486

Applicant(s)

EDGE ET AL.

Examiner

Leonid Shapiro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

***Specification***

1. The disclosure is objected to because of the following informalities:

On page 25, Lines 3-8 has item numbers in parentisses, which are not shown in Fig. 4-11 numbers need to be removed.

All abbreviations need to be deciphered.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 6-8, 17-20, 31-33 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification/disclosure does not provide support for recited in claims 6-8, 17-20, 31-33 as a whole how to make or use applicant's claimed invention by one skilled in the art. The effect of placing the red-blue elements displayed by the display device with the dithered green background is not disclosed in specification. No working examples disclosing the necessary parameters have been provided. Without this disclosure, one skilled in the art cannot practice the invention without undue experimentation because of the uncertainty of placing the red-blue elements displayed by the display device with the dithered green background.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-5, 9-13, 26, 29-30, 34-38 rejected under 35 U.S.C. 103(a) as being unpatentable over Engeldrum et al. (US Patent No. 5,638,117) in view of Hill et al. (US Patent No. 6,243,070 B1).

As to claim 1, Engeldrum et al. teaches a method with characterizing overall gamma for red, blue, and green channels of the display device based on estimated gamma (See Fig. 1-2, items 102, 104, 302, 304 in description See Col. 3, Lines 2-20); modifying the overall gamma based on a gray balance evaluation for the red and blue channels (See Fig. 5, items 500, 102, 206, in description See Col. 3, Lines 50-63).

Engeldrum et al. teaches a preliminary step in characterizing or calibrating monitor to set up the brightness to a value that will maximize the number of visible colors that can be displayed (See Fig. 2, items 104, 200, in description See Col. 2, Lines 43-48).

Engeldrum et al. does not teach estimating an initial gamma for a display device based on selection of a displayed green element that appears to most closely blend with a dithered green background.

Hill et al. shows why an initial (preliminary) gamma done with the green color (60% luminance) (See Col. 4, Lines 66-67 and Col. 5, lines 1-90) and how green background overlaid

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by a number of closely spaced black lines is used (See Col. 35, Lines 4-10). Hill et al. does not show dithered green background. Since criticality of using the dithered green background was not shown in the specifications, drawings or claims one of ordinary skill in the art will use green background overlaid by a number of closely spaced black lines. It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Hill et al approach using green background in the Engeldrum et al. method in order to display color images accurately and clearly.

As to claim 26, Engeldrum et al. teaches a computer-readable medium containing instructions to cause a programmable processor to characterize overall gamma for red, blue, and green channels of the display device based on estimated gamma (See Fig. 1-2, items 102, 104, 302, 304 in description See Col. 3, Lines 2-20); modify the overall gamma based on a gray balance evaluation for the red and blue channels (See Fig. 5, items 500, 102, 206, in description See Col. 3, Lines 57-63).

Engeldrum et al. teaches a preliminary step in characterizing or calibrating monitor to set up the brightness to a value that will maximize the number of visible colors that can be displayed (See Fig. 2, items 104, 200, in description See Col. 2, Lines 43-48).

Engeldrum et al. does not teach estimating an initial gamma for a display device based on selection of a displayed green element that appears to most closely blend with a dithered green background.

Hill et al. shows why an initial (preliminary) gamma done with the green color (60% luminance) (See Col. 4, Lines 66-67 and Col. 5, lines 1-90) and how green background is used (See Col. 35, Lines 4-10). It would have been obvious to one of ordinary skill in the art at the

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time of the invention to implement the Hill et al approach in the Engeldrum et al. apparatus in order to display color images accurately and clearly.

As to claims 4-5, Engeldrum et al. and Hill et al. teaches selecting one of a first plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background; estimating a coarse gamma for the display device based on the selected one of the first plurality of green elements (See above the rejection of claim 1).

Engeldrum et al. and Hill et al. do not teach selecting one of the second plurality of the green elements displayed by the display device that appears to most closely blend with dithered green background, wherein the second plurality of green elements includes the selected one of the first plurality of green elements; and estimating a fine gamma for display device based on the selected one of the second of plurality of green elements, wherein the estimated fine gamma is the estimated gamma and the first plurality of green elements represent greater gradations in the green intensity that the second plurality of green elements.

One of ordinary skill in the art will recognize that the first and second plurality of green elements only different in the scale of gradations, therefore will required no new approach. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the second plurality of green elements and estimate a fine gamma in the Engeldrum et al. and Hill et al method in order to display color images accurately and clearly.

As to claims 29-30, Engeldrum et al. and Hill et al. teaches selecting one of a first plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background; estimating a coarse gamma for the display device based on the selected one of the first plurality of green elements (See above the rejection of claim 1).

Engeldrum et al. and Hill et al. do not teach selecting one of the second plurality of the green elements displayed by the display device that appears to most closely blend with dithered green background, wherein the second plurality of green elements includes the selected one of the first plurality of green elements; and estimating a fine gamma for display device based on the selected one of the second of plurality of green elements, wherein the estimated fine gamma is the estimated gamma and the first plurality of green elements represent greater gradations in the green intensity that the second plurality of green elements.

One of ordinary skill in the art will recognize that the first and second plurality of green elements only different in the scale of gradations, therefore will required no new approach. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the second plurality of green elements and estimate a fine gamma in the Engeldrum et al. and Hill et al computer-readable medium in order to display color images accurately and clearly.

As to claim 9, Hill et al. teaches the estimated gamma is limited to the green channel (See Col. 35, lines 3-10, and Lines 13-19, and Col. 36, Lines 46-52).

As to claim 34, Hill et al. teaches the estimated gamma is limited to the green channel (See Col. 35, lines 3-10, and Lines 13-19, and Col. 36, Lines 46-52).

As to claim 10, Engeldrum et al. teaches how to estimate both the blackpoint and the gray balance of the display device; and characterizing the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance (See Fig. 4, 5 items 302, 104, 102 in description See Col. 3, Lines 51-55 and Col.4, Lines 33-39).

As to claim 35, Engeldrum et al. teaches how to estimate both the blackpoint and the gray balance of the display device; and characterizing the colorimetric response of the display device

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based on the estimated gamma, blackpoint, and gray balance (See Fig. 4, 5 items 302, 104, 102 in description See Col. 3, Lines 51-55 and Col.4, Lines 33-39).

As to claims 11-12, Seegers et al. teaches transmitting information representing the estimated blackpoint, gamma and gray balance to a remote server on the network; delivering the modified color image to the client via the computer network for the display on the display device (Fig. 1, items 14, 24, in description See Col. 1, Line 64-67 and Col.2, Lines 1-9).

As to claims 36-37, Seegers et al. teaches transmitting information representing the estimated blackpoint, gamma and gray balance to a remote server on the network; delivering the modified color image to the client via the computer network for the display on the display device (Fig. 1, items 14, 24, in description See Col. 1, Line 64-67 and Col.2, Lines 1-9).

As to claim 13, Engeldrum et al. teaches the dithered green background overlaid by a number of closely spaced black lines.

One of ordinary skill in the art will recognize that any value of green background would be assigned for the testing and characterization, including 33% green background. It would have been obvious to one of ordinary skill in the art at the time of the invention to use 33% green background in the Engeldrum et al. and Hill et al method in order to display color images accurately and clearly.

As to claim 38, Engeldrum et al. teaches the dithered green background overlaid by a number of closely spaced black lines.

One of ordinary skill in the art will recognize that any value of green background would be assigned for the testing and characterization, including 33% green background. It would have been obvious to one of ordinary skill in the art at the time of the invention to use 33% green



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background in the Engeldrum et al. and Hill et al computer-readable medium in order to display color images accurately and clearly.

4. Claims 2-3, 15-16, 21-25, 27-28 rejected under 35 U.S.C. 103(a) as being unpatentable over Engeldrum et al. and Hill et al. as aforementioned in claims 1 in view of Seegers et al. (US Patent No. 6, 439, 722 B1).

As to claim 2, Engeldrum et al. and Hill et al. do not teach to modify a color image based at least in part on the estimated gamma; and delivering the modified color image to the display device.

Seegers et al. show how to modify a color image based at least in part on the estimated gamma; and delivering the modified color image to the display device (See Col. 1, Lines 63-67 and Col.2, Lines 1-9). ). It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Seegers et al approach in the Engeldrum et al. and Hill et al. method in order to display color images accurately and clearly.

As to claim 27, Engeldrum et al. and Hill et al. do not teach to modify a color image based at least in part on the estimated gamma; and delivering the modified color image to the display device.

Seegers et al. show how to modify a color image based at least in part on the estimated gamma; and delivering the modified color image to the display device (See Col. 1, Lines 63-67 and Col.2, Lines 1-9). It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Seegers et al approach in the Engeldrum et al. and Hill et al. the computer-readable medium in order to display color images accurately and clearly.

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As to claim 3, Engeldrum et al. and Hill et al. do not teach the display device is associated with a client residing on a computer network and transmitting information representing the estimated gamma to a remote server on the network; modifying the color image at the remote server based on the information; and delivering the modified image to the client via the computer network for display on the display device.

Seegers et al. show how the display device is associated with a client residing on a computer network and transmitting information representing the estimated gamma to a remote server on the network; modifying the color image at the remote server based on the information; and delivering the modified image to the client via the computer network for display on the display device (See Col. 1, Lines 63-67 and Col.2, Lines 1-9). It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Seegers et al approach in the Engeldrum et al. and Hill et al. method in order to display color images accurately and clearly.

As to claim 28, Engeldrum et al. and Hill et al. do not teach the display device is associated with a client residing on a computer network and transmitting information representing the estimated gamma to a remote server on the network; modifying the color image at the remote server based on the information; and delivering the modified image to the client via the computer network for display on the display device.

Seegers et al. show how the display device is associated with a client residing on a computer network and transmitting information representing the estimated gamma to a remote server on the network; modifying the color image at the remote server based on the information; and delivering the modified image to the client via the computer network for

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display on the display device (See Col. 1, Lines 63-67 and Col.2, Lines 1-9). It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Seegers et al approach in the Engeldrum et al. and Hill et al the computer-readable medium in order to display color images accurately and clearly.

As to claim 15, Engeldrum et al. and Hill et al. teach the information includes an initial gamma for the display device, the initial gamma being determined based on selection of the displayed green element that appears to most closely blend with a dithered green background, and an overall gamma for red, blue, green channels of the display device determined from modification of the initial gamma based on a gray balance evaluation for the red and blue color channels (See rejection of claim 1).

Engeldrum et al. and Hill et al. do not teach a system with a web server to transmit web pages to clients residing on a computer network; a color image server to transmit color images referenced by the web pages to the clients for display devices associated with the clients; a color profile server to guide clients through a color profiling process and obtain information characterizing the color responses of the display devices associated with the clients; one or more color correction modules to modify the color image server based on information to improve the accuracy of the color images when displayed on the respective display device

Seegers et al. teaches a system with a web server to transmit web pages to clients residing on a computer network See Fig. 1, item 14, in description See Col. 4, Lines 42-54); a color image server to transmit color images referenced by the web pages to the clients for display devices associated with the clients (See Col. 1, Lines 63-67 and Col.2, Lines 1-9); a color profile server to guide clients through a color profiling process and obtain information

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characterizing the color responses of the display devices associated with the clients (See Col. 1, Lines 63-67 and Col.2, Lines 1-9); one or more color correction modules to modify the color image server based on information to improve the accuracy of the color images when displayed on the respective display device (See Col. 1, Lines 63-67 and Col.2, Lines 1-9). It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Seegers et al approach in the Engeldrum et al. and Hill et al the system in order to display color images accurately and clearly.

As to claim 16, Seegers et al. teaches the color image server the information to the client in the web cookie from the client to server, and the color image server modifies the color image via server based on the contents of the web cookie (See Fig. 1, item 24, in description See Col.1, Lines 63-67 and Col. 2, lines 1-9).

As to claims 21-22 Engeldrum et al. and Hill et al. teaches selecting one of a first plurality of green elements displayed by the display device that appears to most closely blend with the dithered green background; estimating a coarse gamma for the display device based on the selected one of the first plurality of green elements (See above the rejection of claim 1).

Engeldrum et al. and Hill et al. do not teach selecting one of the second plurality of the green elements displayed by the display device that appears to most closely blend with dithered green background, wherein the second plurality of green elements includes the selected one of the first plurality of green elements; and estimating a fine gamma for display device based on the selected one of the second of plurality of green elements, wherein the estimated fine gamma is the estimated gamma and the first plurality of green elements represent greater gradations in the green intensity that the second plurality of green elements.

One of ordinary skill in the art will recognize that the first and second plurality of green elements only different in the scale of gradations, therefore will required no new approach. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the second plurality of green elements and estimate a fine gamma in the Engeldrum et al. and Hill et al system in order to display color images accurately and clearly.

As to claim 23, Hill et al. teaches the estimated gamma is limited to the green channel (See Col. 35, lines 3-10, and Lines 13-19, and Col. 36, Lines 46-52).

As to claim 24, Engeldrum et al. teaches how to estimate both the blackpoint and the gray balance of the display device; and characterizing the colorimetric response of the display device based on the estimated gamma, blackpoint, and gray balance (See Fig. 4, 5 items 302, 104, 102 in description See Col. 3, Lines 51-55 and Col.4, Lines 33-39).

As to claim 25, Engeldrum et al. teaches the dithered green background overlaid by a number of closely spaced black lines.

One of ordinary skill in the art will recognize that any value of green background would be assigned for the testing and characterization, including 33% green background. It would have been obvious to one of ordinary skill in the art at the time of the invention to use 33% green background in the Engeldrum et al. and Hill et al. system in order to display color images accurately and clearly.

5. Claims 14, 39-40 rejected under 35 U.S.C. 103(a) as being unpatentable over Engeldrum et al. and Hill et al. as aforementioned in claims 1, 15 in view of Craft et al. (US Patent No. 6, 349,300 B1).

As to claim 14, Engeldrum et al. and Hill et al. do not show guiding the client through the process of obtaining the estimated gamma by delivering one or more instructional web pages to the client.

Craft et al. teaches guiding the client through the process of obtaining the estimated gamma by delivering one or more instructional web pages to the client (See Fig. 5, items 28, 30, in description See Col. 6, Lines 29-5900. It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Craft et al approach in the Engeldrum et al. and Hill et al. method in order to display color images accurately and clearly.

As to claim 39, Engeldrum et al. and Hill et al. do not show guiding the client through the process of obtaining the estimated gamma by delivering one or more instructional web pages to the client.

Craft et al. teaches guiding the client through the process of obtaining the estimated gamma by delivering one or more instructional web pages to the client (See Fig. 5, items 28, 30, in description See Col. 6, Lines 29-5900. It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the Craft et al approach in the Engeldrum et al. and Hill et al. computer-readable medium in order to display color images accurately and clearly.

As to claim 40, Craft et al teaches the instructions are contained both in physical data storage media and signals transmitted between the client and other resources on the computer network (See Fig. 1, items 35, 18, in description See Col. 1, Lines 42-46 and Col. 2, Lines 20-33).

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*Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

The Gu (US Patent No. 5,874,988) reference discloses system and method for automated color correction.

The Shetter et al. (US Patent No. 6,342,896 B1) reference discloses system and method for efficiently implementing and modifying foreground and background color selections.

The Holub (US Patent No. 6,043,909) reference discloses system for distributing and controlling color reproduction at multiple sides.

The Van Aken et al. (US Patent No. 6,043,894) reference discloses method for maintaining uniformity among color measuring instruments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 703-305-5661. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

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Is

October 18, 2002

  
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